

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Original) A computer system adapted to play audio files, said computer system comprising:

a system CPU;

memory;

at least one drive comprising compressed audio data, said compressed audio data residing in one or more audio files;

a play list software program for selecting and storing a play list comprising one or more of said audio files;

a first operating system adapted to control at least said system CPU and said memory; and

a second operating system, said second operating system being stored in BIOS and adapted to retrieve said play list and cause said drive to read at least one said audio file of said play list, to cause said system CPU to decompress the compressed audio data of said file and provide decompressed audio data, and to cause said decompressed audio data to be stored in said memory.

2. (Original) A computer system adapted to play audio files, said computer system comprising:

a system CPU;

memory;

at least one drive comprising compressed audio data;

a first operating system adapted to control at least said system CPU and said memory; and

a second operating system, said second operating system being stored in BIOS and adapted to cause said system CPU to decompress said compressed audio data and store said decompressed audio data in said memory.

3. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

    a system CPU;  
    memory;  
    at least one drive comprising compressed audio data; and  
    a mini-operating system running instead of a first operating system controlling said computer system, wherein said mini-operating system operates only to play said audio files, and wherein said mini-operating system stored in BIOS, said mini-operating system being adapted to cause said system CPU to decompress said compressed audio data and store said compressed audio data in said memory.

4. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

    compressed audio data;  
    a system CPU; and  
    a mini-operating system running instead of a first operating system controlling said computer system, wherein said mini-operating system operates only to play said audio files, and wherein said mini-operating system stored in BIOS, said mini-operating system being adapted to cause said system CPU to decompress said compressed audio data.

5. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

    compressed audio data;

    a system CPU;

    an audio controller; and

a mini-operating system running instead of a first operating system controlling said computer system, wherein said mini-operating system operates only to play said audio files, and wherein said mini-operating system stored in BIOS, said mini-operating system controlling said audio controller and said system CPU, so as to cause said system CPU to decompress said compressed audio data.

6. (Original) A computer system adapted to play audio files, said computer system comprising:

- compressed audio data;
- a system CPU;
- an audio controller;
- a first operating system adapted to control at least said system CPU; and
- a second operating system stored in BIOS, said second operating system controlling said audio controller and said system CPU, so as to cause said system CPU to decompress said compressed audio data.

7. (Original) A computer system adapted to play audio files, said computer system comprising:

- a system CPU;
- memory;
- at least one drive comprising compressed audio data, said compressed audio data residing in one or more audio files;
- a first operating system adapted to control at least said system CPU and said memory;
- a play list software program executable under said first operating system, said play list software program being adapted to permit selection and storage of a play list comprising one or more of said audio files; and
- a second operating system, said second operating system being stored in BIOS and adapted to retrieve said play list and cause said drive to read at least one said audio file of said play list, to cause said system CPU to decompress the compressed audio data of said file and

provide decompressed audio data, and to cause said decompressed audio data to be stored in said memory.

8. (Original) A computer system adapted to play audio files, said computer system comprising:

at least one drive comprising audio data, said audio data residing in one or more audio files;

a system CPU;

memory;

a first operating system adapted to control at least said system CPU and said memory; a play list software program executable under said first operating system, said play list software program being adapted to permit selection and storage of a play list comprising one or more of said audio files; and

a second operating system, said second operating system being stored in BIOS and adapted to retrieve said play list and cause said drive to read at least one said audio file of said play list, and to play said at least one said audio file of said play list.

9. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

a drive comprising at least one audio file;  
an audio controller; and

a mini-operating system running instead of a first operating system controlling said computer system, wherein said mini-operating system operates only to play said audio files, and wherein said mini-operating system stored in BIOS, said mini-operating system controlling said audio controller, so as to cause said audio controller to play said at least one audio file.

10. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

a system CPU;  
a drive comprising at least one compressed audio file; and  
a mini-operating system running instead of a first operating system controlling said computer system, wherein said mini-operating system operates only to play said audio files, and wherein said mini-operating system stored in BIOS, said mini-operating system controlling said system CPU, so as to cause said system CPU to decompress said at least one audio file.

11. (Original) A method of playing audio files on a computer system, said method comprising:  
booting a first operating system;

creating and storing a play list comprising a list of compressed audio files residing on one or more drives of a computer system having at least a drive, a CPU, and a memory;  
terminating said first operating system;

booting a second operating system upon activation by a switch, wherein said second operating system running instead of said first operating system to operate only to play said compressed audio files, and wherein said second operating system stored in BIOS, said second operating system being adapted to cause said system CPU to decompress said compressed audio data and store said compressed audio data in said memory;  
reading said play list;

reading said compressed audio files from said drive based on said play list;

providing said compressed audio data to said CPU for decompressing the data of said compressed audio file into decompressed audio data;

storing said decompressed audio data in said memory; and  
retrieving said decompressed audio data from said memory for playing.

12. (Previously presented) A method of playing audio files on a computer system, said method comprising:

booting a first operating system;

creating and storing a play list comprising a list of compressed audio files residing on one or more drives of a computer system having at least a drive, a CPU, and a memory; terminating said first operating system;

booting a second operating system, wherein said second operating system running instead of said first operating system to operate only to play said compressed audio files, and wherein said second operating system stored in BIOS, said second operating system being adapted to cause said system CPU to decompress said compressed audio data and store said compressed audio data in said memory;

reading said play list;

reading said compressed audio files from said drive based on said play list; providing said compressed audio data to said CPU for decompressing the data of said compressed audio file into decompressed audio data;

storing said decompressed audio data in said memory; and

retrieving said decompressed audio data from said memory for playing.

13. (Currently amended) A computer system adapted to play audio files, said computer system comprising:

a system CPU;

memory;

at least one drive comprising compressed audio data;

a first operating system adapted to control at least said system CPU and said memory;

a second operating system ~~operating independently of said system CPU~~, said second operating system being adapted to cause said system CPU to decompress said compressed audio data and store said decompressed audio data in said memory;

a first switch, the activation of said first switch causing said first operating system to boot; and

a second switch, the activation of said second switch causing said second operating system to boot.

14. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

a system CPU;

memory;

a first operating system adapted to control at least said system CPU and said memory; at least one drive comprising compressed audio data;

a second operating system running independently of said first operating system, said second operating system being adapted to cause said system CPU to decompress said compressed audio data and store said compressed audio data in said memory; and a switch, the activation of said switch causing said second operating system to boot.

15. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

compressed audio data;

a system CPU;

a first operating system adapted to control at least said system CPU; a second operating system operating independently of said first operating system, said second operating system being adapted to cause said system CPU to decompress said compressed audio data; and

a switch, the activation of said switch causing said second operating system to boot and cause said system CPU to decompress said compressed audio data.

16. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

compressed audio data;

a system CPU;

an audio controller;

a first operating system adapted to control at least said system CPU;

a second operating system operating independently of said first operating system, said second operating system controlling said audio controller and said system CPU, so as to cause said system CPU to decompress said compressed audio data; and a switch, the activation of said switch causing said second operating system to boot.

17. (Original) A computer system adapted to play audio files, said computer system comprising:

compressed audio data;  
a system CPU;  
an audio controller;  
a first operating system adapted to control at least said system CPU;  
a second operating system operating independently of said first operating system, said second operating system controlling said audio controller and said system CPU, so as to cause said system CPU to decompress said compressed audio data; and  
a switch, the activation of said switch causing said second operating system to boot.

18. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

a drive comprising at least one audio file;  
an audio controller;  
a mini-operating system running instead of a first operating system controlling said computer system, wherein said mini-operating system only operates to play said audio files, said mini-operating system being stored in BIOS and adapted to control said audio controller, so as to cause said audio controller to play said at least one audio file; and  
a switch, the activation of said switch causing said operating system to boot.

19. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

a system CPU;

a drive comprising at least one compressed audio file; and  
a mini-operating system running instead of a first operating system controlling said computer system, wherein said mini-operating system only operates to play said audio files, said mini-operating system being stored in BIOS and adapted to control said system CPU, so as to cause said system CPU to decompress said at least one audio file; and  
a switch, the activation of said switch causing said operating system to boot.

20. (Currently amended) A computer system adapted to play audio files and run under a operating system, said computer system comprising:

a system CPU;  
memory;  
at least one drive comprising compressed audio data; and  
an audio controller coupled to said system CPU, memory and drive;  
said audio controller operating independently of said operating system, being adapted to cause said drive to read said compressed audio data, to cause said system CPU to decompress said compressed audio data, thereby providing decompressed audio data, and to cause said decompressed audio data to be stored in said memory.

21. (Original) A computer system as claimed in claim 20, wherein said audio controller is further adapted to place said system CPU in standby state when said system CPU is not decompressing said compressed audio data.

22. (Original) A computer system as claimed in claim 20, wherein said audio controller is further adapted to cause said decompressed audio data to be retrieved from said memory for playing.

23. (Original) A computer system as claimed in claim 20, wherein said drive is a hard disk, removable disk, floppy disk, magnetic storage medium, optical storage medium, or IDE device.

24. (Original) A computer system as claimed in claim 20, wherein said compressed audio data is in MP3, WMA, AAC, or other secured compressed audio format.
25. (Original) A computer system as claimed in claim 20, further comprising at least one digital computer bus, wherein said audio controller is coupled to at least one of said system CPU, memory, and drive via said digital computer bus.
26. (Original) A computer system as claimed in claim 20, further comprising a mini-OS.
27. (Original) A computer system as claimed in claim 20, further comprising an LCD interface for generating signals to an LCD display for displaying song name, file/directory name and/or timing data.
28. (Original) A computer system as claimed in claim 20, further comprising a plurality of function keys and a function key interface operable with said plurality of function keys, said function keys generating user commands to said audio controller through said function key interface.
29. (Original) A computer system as claimed in claim 28, further comprising a software driver for receiving interrupts generated by at least one of said plurality of function keys and for passing said interrupts to said system CPU.
30. (Original) A computer system as claimed in claim 29, further comprising standard audio player software, wherein said CPU utilizes said interrupts to control said standard audio player software.
31. (Original) A computer system as claimed in claim 20, wherein said audio controller is adapted not to cause said drive to read said compressed audio data, nor to cause said system

CPU to decompress said compressed audio data, nor to cause said decompressed audio data to be stored in said memory, unless said computer system is off, in hibernate mode, in suspend to HDD mode, or in one of power states S4 or S5.

32. (Original) A computer system as claimed in claim 20, wherein said audio controller is adapted not to cause said drive to read said compressed audio data, nor to cause said system CPU to decompress said compressed audio data, nor to cause said decompressed audio data to be stored in said memory, when said computer system is on, in sleep mode, in suspend to RAM mode, or in one of power states S0 or S3.

33. (Original) A computer system as claimed in claim 29, wherein said software driver is adapted not to receive said interrupts generated by at least one of said plurality of function keys nor pass said interrupts to said system CPU, unless said computer system is on, in sleep mode, in suspend to RAM mode, or in one of power states S0 or S3.

34. (Original) A computer system as claimed in claim 20, wherein said compressed audio data is stored in one or more audio files on said drive, said computer system further comprising a play list software program for creating and storing a play list comprising one or more said audio files.

35. (Original) A computer system as claimed in claim 34, wherein said play list software program is executable only when said computer is on or in power state S0.

36. (Original) A computer system as claimed in claim 35, wherein said audio controller is further adapted to cause said drive to read said compressed audio data based, at least in part, on said stored play list.

37. (Original) A computer system adapted to play audio files, said computer system comprising:

a system CPU;  
memory;  
at least one drive comprising compressed audio data, said compressed audio data residing in one or more audio files;  
a play list software program for selecting a play list comprising one or more of said audio files; and  
an audio controller coupled to said system CPU, memory and drive;  
said audio controller being adapted to cause said drive to read at least one said audio file of said play list, to cause said system CPU to decompress the compressed audio data of said file and thereby provide decompressed audio data, and to cause said decompressed audio data to be stored in said memory.

38. (Currently amended) A method of playing audio files on a computer system, said method comprising:

reading compressed audio data from the drive of a computer system having at least a drive, a CPU, and a memory;  
providing said compressed audio data to said CPU for decompressing said compressed audio data, thereby providing decompressed audio data; and  
storing said decompressed audio data in said memory for ~~later~~ playback using a mini-operating system operating independently of a first operating system controlling said computer system, wherein said mini-operating system is operable only to play said compressed audio data.

39. (Original) A method of playing audio files on a computer system as claimed in claim 38, further comprising placing said system CPU in a standby state when said system CPU is not decompressing said compressed audio data.

40. (Original) A method of playing audio files on a computer system as claimed in claim 38, further comprising retrieving said decompressed audio data from said memory for playing.

41. (Original) A method of playing audio files on a computer system as claimed in claim 38, wherein said drive is a hard disk, removable disk, floppy disk, magnetic storage medium, optical storage medium, flash media, or IDE device.

42. (Original) A method of playing audio files on a computer system as claimed in claim 38, wherein said compressed audio data is in MP3, WMA, AAC, or other secured compressed audio format.

43. (Original) A method of playing audio files on a computer system as claimed in claim 38, further comprising generating signals to an LCD display for displaying song name, file/directory name and/or timing data.

44. (Original) A method of playing audio files on a computer system as claimed in claim 38, wherein said computer system further comprises a plurality of function keys, and wherein said method further comprises receiving user commands generated by at least one of said plurality of function keys and utilizing said user commands to control said playing.

45. (Original) A method of playing audio files on a computer system as claimed in claim 38, further comprising receiving interrupts generated by at least one of said plurality of function keys and passing said interrupts to said system CPU.

46. (Original) A method of playing audio files on a computer system as claimed in claim 38, wherein said computer system further comprises standard audio player software, and wherein said method further comprise utilizing said interrupts to control said standard audio player software.

47. (Original) A method of playing audio files on a computer system as claimed in claim 38, wherein said steps of reading compressed audio data from the drive of said computer system,

providing said compressed audio data to said CPU, and storing said decompressed audio data in said memory, are not performed unless said computer system is off, in hibernate mode, in suspend to HDD mode, or in one of power states S4 or S5.

48. (Cancelled)

49. (Original) A method of playing audio files on a computer system as claimed in claim 45, wherein said steps of receiving interrupts generated by at least one of said plurality of function keys and passing said interrupts to said system CPU are not performed unless said computer system is on, in sleep mode, in suspend to RAM mode, or in one of power states S0 or S3.

50. (Cancelled)

51. (Cancelled)

52. (Cancelled)

53. (Currently amended) A method of playing audio files on a computer system, said method comprising:

creating and storing a play list comprising a list of compressed audio files residing on one or more drives of a computer system having at least a drive, a CPU, and a memory; reading said play list;

reading said compressed audio files from said drive based on said play list; providing said compressed audio data to said CPU for decompressing the data of said compressed audio file into decompressed audio data;

storing said decompressed audio data in said memory for later playback using a mini-operating system operating independently of a first operating system controlling said

computer system, wherein said mini-operating system is operable only to play said compressed audio data; and

using said mini-operating system for retrieving said decompressed audio data from said memory for playing.

54. (Previously presented) A method of playing audio files on a computer system, said method comprising:

when said computer system is on, in sleep mode, in suspend to RAM mode, or in one of power states S0 or S3, creating and storing a play list comprising a list of compressed audio files residing on one or more drives of a computer system having at least a drive, a CPU, and a memory; and

when said computer system is off, in hibernate mode, in suspend to HDD mode, or in one of power states S4 or S5, playing the compressed audio files of said play list, using a mini-operating system operating independently of a first operating system controlling said computer system, wherein said mini-operating system is operable only to play said audio files.

55. (Currently amended) A method of playing audio files on a computer system, said method comprising:

when said computer system is on, in sleep mode, in suspend to RAM mode, or in one of power states S0 or S3, creating and storing a play list comprising a list of compressed audio files residing on one or more drives of a computer system having at least a drive, a CPU, and a memory, wherein said list of compressed audio files is stored for later playback using a mini-operating system operating independently of a first operating system controlling said computer system, wherein said mini-operating system is operable only to play said compressed audio data when said computer system is off;

when said computer system is off, in hibernate mode, in suspend to HDD mode, or in one of power states S4 or S5, reading said play list;

when said computer system is off, in hibernate mode, in suspend to HDD mode, or in one of power states S4 or S5, reading said compressed audio files from said drive based on said play list;

when said computer system is off, in hibernate mode, in suspend to HDD mode, or in one of power states S4 or S5, providing said compressed audio data to said CPU for decompressing the data of said compressed audio file into decompressed audio data; when said computer system is off, in hibernate mode, in suspend to HDD mode, or in one of power states S4 or S5, storing said decompressed audio data in said memory; and when said computer system is off, in hibernate mode, in suspend to HDD mode, or in one of power states S4 or S5, retrieving said decompressed audio data from said memory for playing.

56. (Currently amended) A method of playing audio files on a computer system, said method comprising:

reading compressed audio data from the drive of a computer system, said computer system having at least a drive, a CPU, and a memory;

providing said compressed audio data to said CPU for decompressing said compressed audio data into decompressed audio data;

storing said decompressed audio data in said memory for ~~later~~ playback using a mini-operating system operating independently of a first operating system controlling said computer system, wherein said mini-operating system is operable only to play said compressed audio data; and

using said mini-operating system for playing said decompressed audio data from said memory.

57. (Original) A computer system adapted to play audio files, said computer system comprising:

a system CPU;

memory;

at least one drive comprising compressed audio data, said compressed audio data residing in one or more audio files;

a play list software program for selecting and storing a play list comprising one or more of said audio files; and

an audio controller coupled to said system CPU, memory and drive;

said audio controller being adapted to retrieve said play list and cause said drive to read at least one said audio file of said play list, to cause said system CPU to decompress the compressed audio data of said file and provide decompressed audio data, to cause said decompressed audio data to be stored in said memory, and to cause said decompressed audio data to be played from said memory.

58. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

compressed audio data residing in one or more audio files;

at least one function key configured to enable a user to select at least one of said audio files;

a system CPU;

an audio controller; and

a mini-operating system running instead of a first operating system controlling said computer system that only operates to play said audio files, wherein said mini-operating system comprising file management software, said file management software configured to manage said audio files and to permit said user to access said audio files via said at least one function key, said operating system also configured to control said audio controller and said CPU to cause said CPU to decompress said at least one audio file selected by said user.

59. (Original) The computer system of claim 58, further comprising an LCD display configured to display a file/directory name for said audio files.

60. (Previously presented) A computer system adapted to play audio files, said computer system comprising:

a system CPU;  
memory;  
at least one drive comprising compressed audio data residing in one or more audio files;  
at least one function key configured to enable a user to select at least one of said audio files; and  
a mini-operating system running instead of a first operating system controlling said computer system that only operates to play said audio files, wherein said mini-operating system comprising files management software, said file management software configured to manage said audio files and permit said user to access said audio files via said at least one function key, said operating system also configured to control said CPU to cause said CPU to decompress said at least one audio files selected by said user.

61. (Previously presented) The computer system of claim 60, further comprising an LCD display configured to display a file/directory name for said compressed audio data.

62-69. (Withdrawn)